

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 101755, 166A

Source: TFW30

Date Processed by STIC: 11-15-07

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IFWO

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/755,166A

DATE: 11/15/2004

TIME: 11:51:16

Input Set : A:\ISIS5425.ST25.txt
 Output Set: N:\CRF4\11152004\J755166A.raw

3 <110> APPLICANT: Manoharan, Muthiah
 4 Cook, Phillip Dan
 5 Bennett, Clarence Frank
 7 <120> TITLE OF INVENTION: DERIVATIZED OLIGONUCLEOTIDES HAVING IMPROVED UPTAKE AND
 HER
 8 PROPERTIES
 10 <130> FILE REFERENCE: ISIS-5425
 12 <140> CURRENT APPLICATION NUMBER: US 10/755,166A
 13 <141> CURRENT FILING DATE: 2004-01-09
 15 <150> PRIOR APPLICATION NUMBER: US 10/073,718
 16 <151> PRIOR FILING DATE: 2002-02-11
 18 <150> PRIOR APPLICATION NUMBER: US 09/633,659
 19 <151> PRIOR FILING DATE: 2000-08-07
 21 <150> PRIOR APPLICATION NUMBER: US 08/211,882
 22 <151> PRIOR FILING DATE: 1994-04-22
 24 <150> PRIOR APPLICATION NUMBER: PCT/US92/09196
 25 <151> PRIOR FILING DATE: 1992-10-23
 27 <160> NUMBER OF SEQ ID NOS: 47
 29 <170> SOFTWARE: PatentIn version 3.3
 31 <210> SEQ ID NO: 1
 32 <211> LENGTH: 20
 33 <212> TYPE: DNA
 34 <213> ORGANISM: Artificial
 36 <220> FEATURE:
 37 <223> OTHER INFORMATION: Oligonucleotide
 40 <220> FEATURE:
 41 <221> NAME/KEY: misc_feature
 42 <222> LOCATION: (6)..(6)
 43 <223> OTHER INFORMATION: nucleotide functionalized to include a cholic acid linked via
 44 linker to the heterocyclic base of a 2'-deoxyuridine nucleotide
 46 <400> SEQUENCE: 1
 47 ttgcttccat cttcctcgtc
 50 <210> SEQ ID NO: 2
 51 <211> LENGTH: 17
 52 <212> TYPE: DNA
 53 <213> ORGANISM: Artificial
 55 <220> FEATURE:
 56 <223> OTHER INFORMATION: Oligodeoxynucleotide
 59 <220> FEATURE:
 60 <221> NAME/KEY: misc_feature
 61 <222> LOCATION: (1)..(1)
 62 <223> OTHER INFORMATION: cholic acid
 64 <220> FEATURE:

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65 <221> NAME/KEY: misc_feature

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67 <223> OTHER INFORMATION: phosphorothioate inter-nucleotide backbone linkage
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70 ctgtctccat cttcaact
73 <210> SEQ ID NO: 3
74 <211> LENGTH: 20
75 <212> TYPE: DNA
76 <213> ORGANISM: Artificial
78 <220> FEATURE:
79 <223> OTHER INFORMATION: Oligodeoxynucleotide
82 <220> FEATURE:
83 <221> NAME/KEY: misc_feature
84 <222> LOCATION: (1)..(19)
85 <223> OTHER INFORMATION: phosphorothioate inter-nucleotide backbone linkage
87 <220> FEATURE:
88 <221> NAME/KEY: misc_feature
89 <222> LOCATION: (20)..(20)
90 <223> OTHER INFORMATION: cholic acid
92 <400> SEQUENCE: 3
93 ctgtctccat cctttcaact
96 <210> SEQ ID NO: 4
97 <211> LENGTH: 18
98 <212> TYPE: DNA
99 <213> ORGANISM: Artificial
101 <220> FEATURE:
102 <223> OTHER INFORMATION: Oligodeoxynucleotide
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107 <222> LOCATION: (1)..(17)
108 <223> OTHER INFORMATION: phosphorothioate inter-nucleotide backbone linkage
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112 <222> LOCATION: (18)..(18)
113 <223> OTHER INFORMATION: cholic acid
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121 <212> TYPE: DNA
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133 <220> FEATURE:
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135 <222> LOCATION: (1)..(1)

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136 <223> OTHER INFORMATION: cholic acid
 138 <220> FEATURE:
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 140 <222> LOCATION: (17)..(17)
 141 <223> OTHER INFORMATION: cholic acid
 143 <400> SEQUENCE: 5
 144 ctgtctccat cttcaact 17
 147 <210> SEQ ID NO: 6
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 158 <222> LOCATION: (1)..(1)
 159 <223> OTHER INFORMATION: cholic acid
 161 <220> FEATURE:
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 163 <222> LOCATION: (1)..(12)
 164 <223> OTHER INFORMATION: phosphorothioate
 166 <220> FEATURE:
 167 <221> NAME/KEY: misc_feature
 168 <222> LOCATION: (1)..(12)
 169 <223> OTHER INFORMATION: 2'-O-methyl
 171 <400> SEQUENCE: 6 12
 172 cccaaagcua ga
 175 <210> SEQ ID NO: 7
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 177 <212> TYPE: RNA
 178 <213> ORGANISM: Artificial
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 186 <222> LOCATION: (1)..(12)
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 191 <222> LOCATION: (1)..(12)
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 199 <400> SEQUENCE: 7 12
 200 cccaaagcua ga
 203 <210> SEQ ID NO: 8
 204 <211> LENGTH: 12

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205 <212> TYPE: RNA
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208 <220> FEATURE:
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212 <220> FEATURE:
213 <221> NAME/KEY: misc_feature
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215 <223> OTHER INFORMATION: cholic acid
217 <220> FEATURE:
218 <221> NAME/KEY: misc_feature
219 <222> LOCATION: (1)..(12)
220 <223> OTHER INFORMATION: phosphorothioate
222 <220> FEATURE:
223 <221> NAME/KEY: misc_feature
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225 <223> OTHER INFORMATION: 2'-O-methyl
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233 <212> TYPE: DNA
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236 <220> FEATURE:
237 <223> OTHER INFORMATION: Oligonucleotide
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241 <221> NAME/KEY: misc_feature
242 <222> LOCATION: (6)..(6)
243 <223> OTHER INFORMATION: pentyl-N-phthalimido
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250 <211> LENGTH: 20
251 <212> TYPE: DNA
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254 <220> FEATURE:
255 <223> OTHER INFORMATION: Oligonucleotide
258 <220> FEATURE:
259 <221> NAME/KEY: misc_feature
260 <222> LOCATION: (9)..(9)
261 <223> OTHER INFORMATION: pentyl-N-phthalimido functionality
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264 ctgtctccat cctttcaact                           20
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268 <211> LENGTH: 20
269 <212> TYPE: DNA
270 <213> ORGANISM: Artificial
272 <220> FEATURE:
273 <223> OTHER INFORMATION: Oligonucleotide
276 <220> FEATURE:

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277 <221> NAME/KEY: misc_feature
278 <222> LOCATION: (9)..(9)
279 <223> OTHER INFORMATION: pentyl-N-phthalimido functionality
281 <220> FEATURE:
282 <221> NAME/KEY: misc_feature
283 <222> LOCATION: (18)..(18)
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286 <400> SEQUENCE: 11
287 ctgtctccat cctcttca 20
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291 <211> LENGTH: 20
292 <212> TYPE: DNA
293 <213> ORGANISM: Artificial
295 <220> FEATURE:
296 <223> OTHER INFORMATION: Oligonucleotide
299 <220> FEATURE:
300 <221> NAME/KEY: misc_feature
301 <222> LOCATION: (1)..(19)
302 <223> OTHER INFORMATION: phosphorothioate inter-nucleotide backbone linkage
304 <220> FEATURE:
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306 <222> LOCATION: (9)..(9)
307 <223> OTHER INFORMATION: pentyl-N-phthalimido functionality
309 <400> SEQUENCE: 12
310 ttgcctccat cttcctcg 20
313 <210> SEQ ID NO: 13
314 <211> LENGTH: 18
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316 <213> ORGANISM: Artificial
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323 <221> NAME/KEY: misc_feature
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325 <223> OTHER INFORMATION: phosphorothioate inter-nucleotide backbone linkage
327 <220> FEATURE:
328 <221> NAME/KEY: misc_feature
329 <222> LOCATION: (15)..(15)
330 <223> OTHER INFORMATION: pentyl-N-phthalimido functionality
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336 <210> SEQ ID NO: 14
337 <211> LENGTH: 18
338 <212> TYPE: DNA
339 <213> ORGANISM: Artificial
341 <220> FEATURE:
342 <223> OTHER INFORMATION: Oligonucleotide
345 <220> FEATURE:
346 <221> NAME/KEY: misc_feature

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Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete,
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27
Seq#:28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47

VERIFICATION SUMMARY

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